Performance Measurement Tool Kit

May 2003
Revised February 2006

"Government should be results oriented – guided not by process but guided by performance."
George W. Bush

Purpose

- To introduce a methodology for developing, assessing, and improving the quality of Army performance measures.
- To help the Army assess the quality of its existing performance measures.
- To begin development of a performance measurement toolkit.

Why Are We Doing Performance Measurement?

1. *The President, Congress, OMB, GAO, and DoD leadership have committed to linking expenditures to performance.*
2. *Right now, DoD and the Army, do not have way to directly link the PPBS system to warfighting or infrastructure performance.*
3. *All Services are required by Management Initiative Decision (MID) 910 to create performance measures linking outcomes to expenditures.*
4. *Initial focus is on acquisition programs and other areas identified by DoD and Congress.*
5. *Once you have developed performance measures, it will be easier to measure the effectiveness of your program.*
6. *It positions your program to better compete for scarce resources; and*
7. *Performance Measurement helps you make informed resource decisions.*

Performance Measurement Is Hard Work – This Is Not Going To Be An Easy Task.

Procedures to Develop Performance Measures

Recommended steps for development of performance measures in support of budget and performance integration:

Step 1 (covered in this brief)

- Review purpose and scope your of program
- Map the program's inputs, processes and outputs
- Identify the linkage of the programs outputs with other processes and programs
- Identify output and outcome measures—using procedures in this packet. Two parts --
    - Using existing measures
    - Selecting new measures

Step 2

- Conduct informal reviews of measures—peer reviews and reviews by performance management coordination office
- Continue to improve and review measures
- Approval by functional leadership then submit to PEG chairs
- Formal approval process -- through SRG

Your First Steps

- Review purpose and scope of your program
- Map the program's inputs, processes and outputs
- Identify the linkage of the programs outputs with other processes and programs

Example --

Before a doctor is allowed to practice medicine, they extensively study the human body and its anatomy. They learn the tests that are available and what they prove/disprove.

A doctor's knowledge and understanding of the human body allows them to examine test results of set medical performance measures like blood pressure, heart rate, weight, and body temperature. These measures guide them in recommending a course of action to help us 'get better.'

How Do I Define My Program?

Guidance

- ✓ Use the Resource Framework definitions as the start point
- ✓ TOA $$$:
  - Can be used in more than one program
  - Are accounted for by APE, MDEP, Bin, or Sub-Bin
  - Must be uniquely identified in the database

PEG Executive/Appropriation Sponsor Meeting, 16 April 2002

TOA $$$ can be used in more than one program, ie same dollars may be in a base operations support, and counted under well-being in associated binning

Look for BPI performance measures for programs at or below the sub-bin level

Resource Framework

Transformation

- Objective Force
- Interim Force
- Legacy Force

People

- Man the Force
- Well-being
- Leader Development

Readiness

- Unit Training
- Sustainment
- Installations & Infrastructure

Bin

- SRM
- Info Infrastructure
- Facilities Revitalization
- Strat Mobility infrastructure
- Installation & Infrastructure-Other
- Base Opns Spt (BOS)

Sub-Bin

- ✓ BASOPS
- ✓ Family Programs
- ✓ Base Commo
- ✓ Audio-Visual
- ✓ Environmental
- ✓ Force Protection

What Is A Performance Measure?

A Performance Measure is an indicator of performance in relation to your desired result. It examines the extent to which a desired outcome, output, or goal is being achieved. A performance measure consists of Metric(s), a Standard, and Performance Indicators.

- The "Metric" is the unit of measure. A measure may have more than one metric.
- A "Standard" may also be called the target, goal or benchmark. It is what you are trying to achieve.
- "Performance Indicators" are a specific observation characterizing performance.

Basically there are four classes of performance measures that you can use for both functional and economic analysis. They are:

· Outcome Measure -- assesses actual results, effects, or impacts of a program activity compared to its intended purpose.
· Output Measure -- describes goods or services produced and the actual level of activity recorded / effort that was realized.
· Efficiency Measure -- a ratio of outputs to inputs.
· Effectiveness Measure -- identifies critical characteristics of the output that meet customer requirements.

One of the toughest tasks you face is determining what you should measure.

An Example Of A Performance Measure

- A performance measure of an individual's health is ***body temperature***.
- The metric are ***degrees*** measured on the Fahrenheit scale.
- The standard body temperature is ***98.6 degrees*** (plus or minus 1 degree).
- The performance indicators are the result of a thermometer reading that displays the difference in degrees (equal to/plus/minus) from the standard.
- When you take your temperature, the thermometer reading of your body performance is 101.4 degrees.
- 101.4 – 98.6 = 2.8 degrees > the Standard.

But, what does this tell us? If you're 2.8 degrees above the standard should the doctor order more tests? Is an elevated temperature the problem, or, is this just a symptom of the problem? Performance Measures must be clearly defined before you start so you know what the outcome tells you. What are you trying to solve?

What Is Your Bottom Line?

Refining the Lexicon – A Sports Example

Major Professional Sports

Football	Basketball
Hockey	Baseball

Program Areas

Offense ***Defense***

Performance Measures

First Downs ***Points Scored*** ***Turn Overs*** ***Blocked Kicks***

Standard

Conversions ***Yardage Gained*** ***Fumbles*** ***Fumble Recovery*** ***Time of Possessions***

Metrics

Yards Rushed

Field Goals

Sacks

Interceptions

Defensive Touch Downs

Blocked Kicks

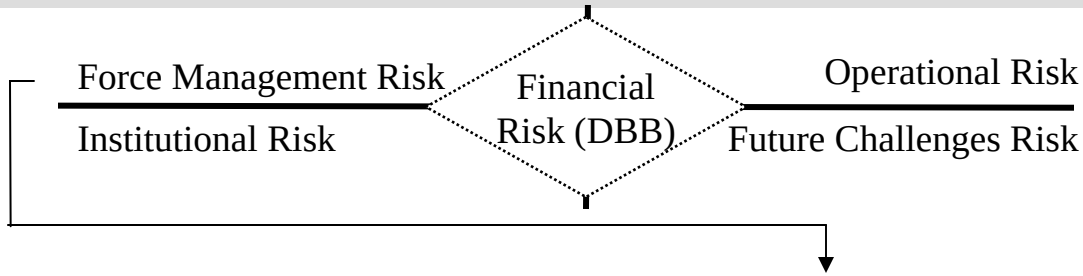
Touch Downs

Yards Passed

Player Experience

Refining the Lexicon -- A Practical Example

2001 QDR Risk Areas -- ***MID 901 Directs Performance Management Efforts Reflect QDR Risk Management Framework***

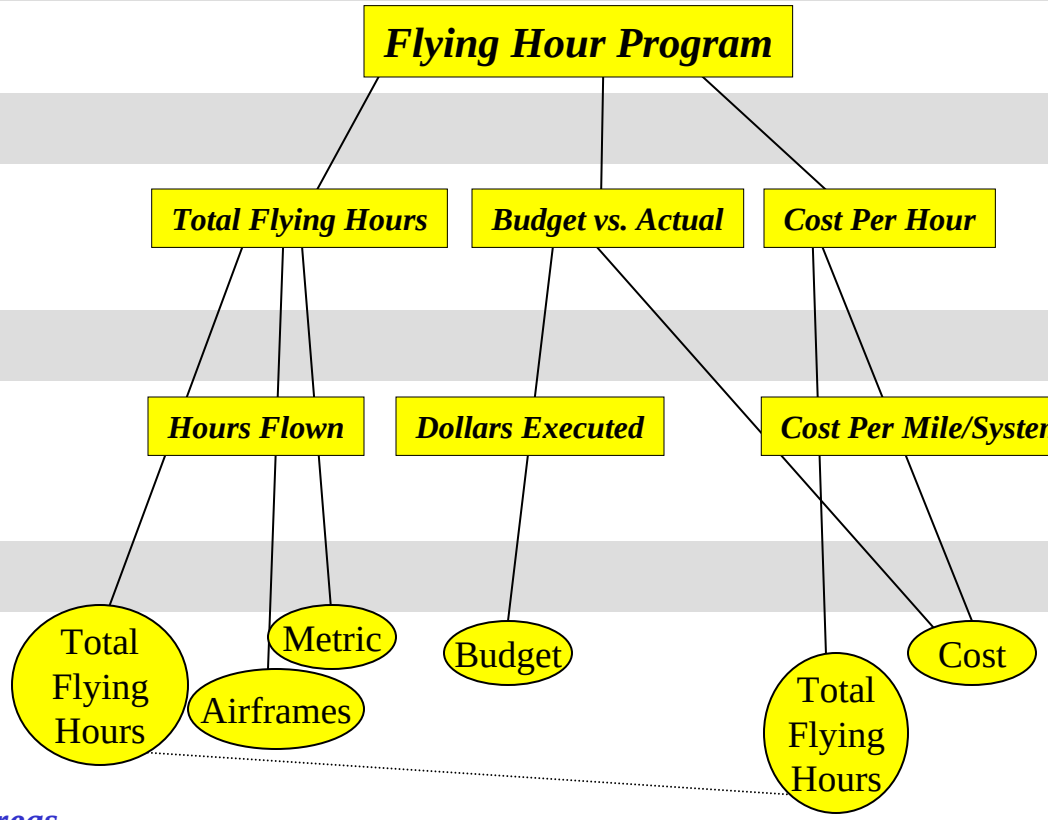


Program Areas

Performance Measures

Standard

Metrics



A ***Risk Area*** consists of ***Program Areas***.
Program Areas consist of ***Performance Measures.***
A ***Performance Measure*** is judged against a ***Standard*** and is made up of ***Metrics.***

What's The Goal Of The Budget Performance Integration Initiative?

- Change the focus from Process/Input measures to Output and Outcome oriented measures.

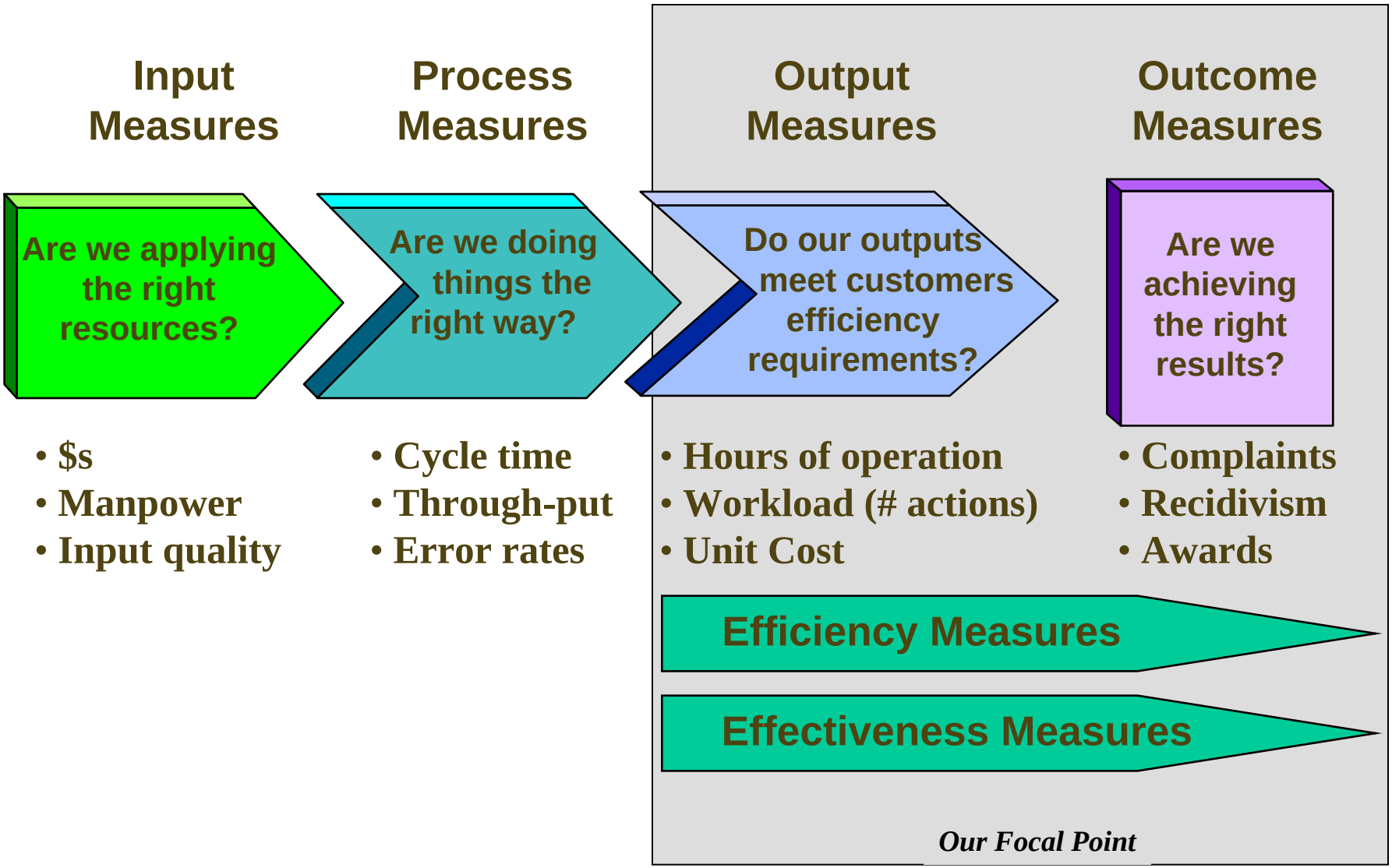
Current* Army Focus Is *Process/Input Measures

Our Desired* Focus Is *Output/Outcome Measures

Program Area	Process/Input Measure *The amount of resources devoted to a program activity.*	Output Measure *Recording of activity or effort, expressed in a quantitative or qualitative manner.*	Outcome Measure *The results of a program activity compared to its intended purpose.*
	Average Teacher Salary	Average Cost Per Student	Average SAT Score
	Under the Salary Cap	Yardage Gained Per Half	Win or Lose Game

- The current structure of the DoD budget makes it impossible to identify the full cost of individual programs and link that cost to the Outcome/Result.

Types of Performance Measures



Developing Performance Measures

Now that you understand the basics, we'll discuss how to develop a performance measure.

How Do You "Do" Performance Measurement?

Before you start to write performance measures, ask yourself these questions:

1. What is the "bottom line" of your program?
2. How will you know you have been successful?
3. If you had to justify funding in front of a council of colonels, what three key facts would you use prove your program was a success?
4. What is the end benefit to the Army from your program?

What is the SPECIFIC aspect that you want to measure?

What do you want to MEASURE?

Who is ACCOUNTABLE for the data?

Is your measure RESULTS oriented?

Is your measure TIME BOUND?

Think "SMART"

SPECIFIC

MEASURE

ACCOUNTABLE

RESULTS ORIENTED

TIME BOUND

What SPECIFIC Part Of Your Program Do You Need To Measure?

What is your the “Bottom Line?” Ask Yourself, “Currently, what are the outcomes or results of my program?”

Examples:

- Improve Resource Management
- Institute Activity-Based Costing Work Processes
- Linking Contracts to Program Results
- Stream-line Employee Performance Evaluation Plans
- Upgrade Office Information Technology
- Analyze Positions For Third Wave Requirements

SPECIFIC

MEASURE

ACCOUNTABLE

RESULTS ORIENTED

TIME BOUND

What Do You Want To Measure?

"What kind of performance measurements should I use – Process/Inputs or Outputs/Outcomes?

Process/Input measures show the plan to accomplish our tasks and display factors that affect agency performance.

Focus Here ***Output*** measures count the goods, services, or productivity produced by an agency (ie, workload).

and

Focus Here ***Outcomes*** measures the actual impact or benefit of an organization's actions.

Examples --

Program	Output Measure	Outcome Measure
Reenlistment	Annual Retention Goals	Experience and Grade Mixture
Recruiting	Number of Recruits	Quality of Recruits
Training	Cost Per Student	Student Test Results
Facilities Management	Cost Per Square Foot	Achieved Building Standards

SPECIFIC

MEASURE

ACCOUNTABLE

RESULTS ORIENTED

TIME BOUND

Who Is Accountable For The Data You Need To Measure?

Who Is Accountable For The Data In My Measure?

- *Some data you need may be owned by other people*
- *Some data may not exist*

Examples:

- OPTEMPO Data are owned by G4, analyzed by ODASA-CE, and used by G-3.
- Crime Statistics are owned by the FBI and used by local law enforcement agencies.
- Operational Data Store (ODS) data are reported to DFAS and may be used by anyone or everyone inside the government.

When Analyzing Your Data Needs, Ask Yourself, “What Links My Program Goals To Individual Achievement And Program Performance?”

Don’t tie yourself to a measure simply because the data are available. Define a good, hard hitting measure first. Then, if there are no data, decide how you can collect it.

SPECIFIC

MEASURE

ACCOUNTABLE

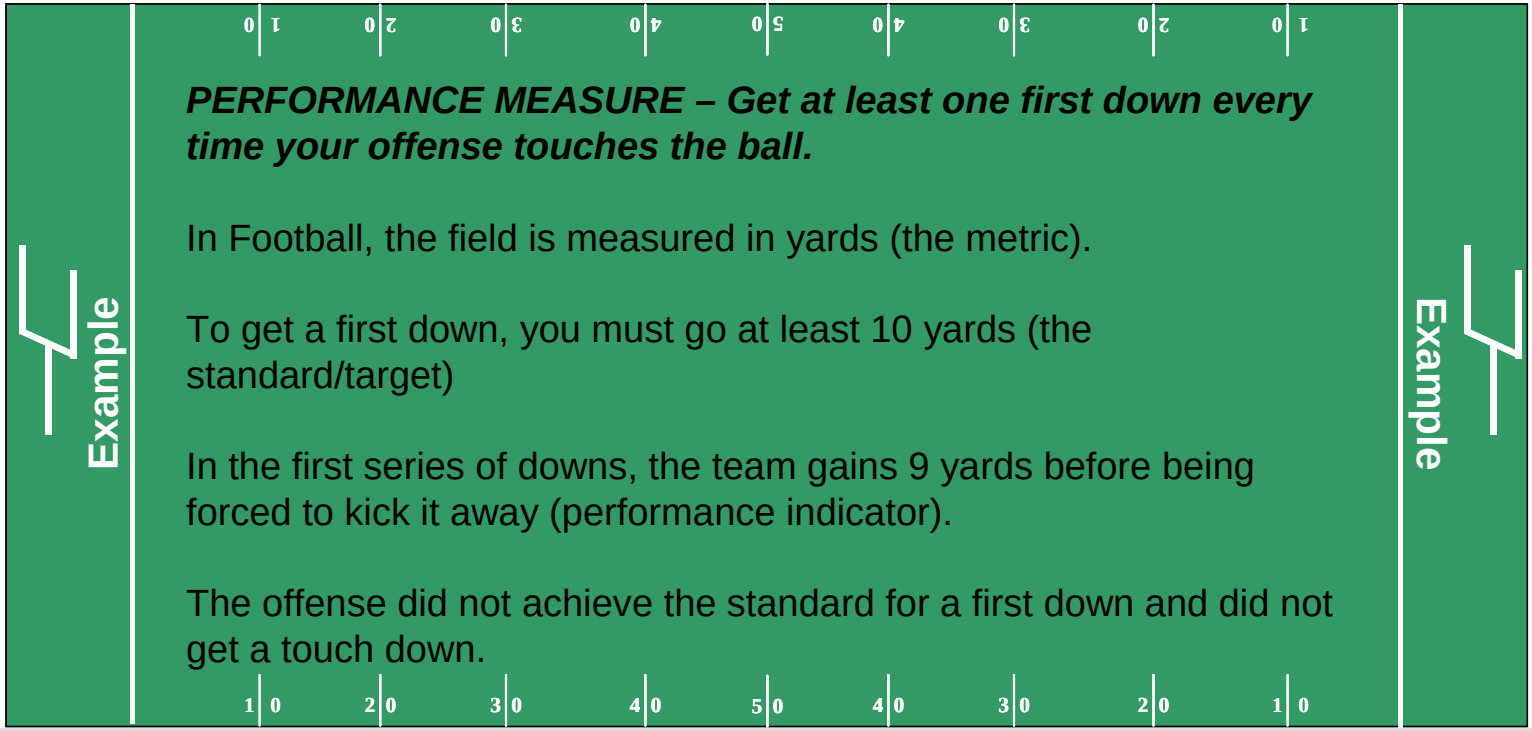
RESULTS ORIENTED

TIME BOUND

Your Measure Should Be Results (Outcome) Oriented

Sure its important to know how your program operates and input measures are okay. But, ***outcome*** measures tell the story better – they show exactly what you achieved versus how you plan to achieve your goals.

In Football, is it better to measure how many players dressed for the game (input measure), or, do you want to measure first downs achieved (outcome measure)?



Your Focus Is On Output and Outcome Measures.

SPECIFIC

MEASURE

ACCOUNTABLE

RESULTS ORIENTED

TIME BOUND

Is Your Measure Time Bound?

- What is the cut-off date of your data?
- How frequently should you measure?
  - *Monthly? Quarterly? Annually?*
- What is the 'refresh' rate of your data?
- At what point in the data cycle should you measure?

"Measuring performance must be a constant process. Only measuring once a year is like dieting on your birthday and not knowing why you cannot lose weight."

Validate Your Measures

Ask Yourself These Questions:

Is the measure relevant to your strategic objective?

Is the measure specific and clearly defined?

Is the measure quantifiable and are the data objective?

Does the measure generate actionable details?

Is the measure results oriented?

Does the measure cover a specific time frame?

Validate Your Measures (Continued)

Whether you use existing measures or write new ones, analyze your measures with these criteria.

Result vs. Activity (Cause and Effect)–

- Result = a change in performance
- Activity = level of effort
- Your measure should focus on results but it is acceptable to have a "limited" amount of activity measures

Single vs. Indexed –

- Single = an independent measure
- Indexed = a combination of multiple measures into a single indicator
- Use indexed measures sparingly

Lead vs. Lag –

- Lead = progress being made toward objective (performance driver)
- Lag = achievement of an objective (output/outcome measure)
- Avoid too many Leading measures – we want to measure achievement -- not necessarily the plan.

Next Steps

1. Conduct informal reviews of measures —
    a) peer reviews and
    b) reviews by performance management coordination office.

2. Continue to improve and review your performance measures.

3. Gain functional leadership approval of your performance measures.

4. Submit your performance measures to PEG chairs, SRS Council of Colonels, or appropriate authorizing authority.

5. Seek formal approval of your measures through your leadership, governing body, or the Senior Review Group (SRG).

Conclusions

- **Avoid Having Too Many Measures –** Minimum of Two Or Three Per Program
- **Use The Right Kinds Of Measures –** At Least One Output And One Outcome Measure Where Possible
- **Measure What's Important –** Not Just The Items For Which You Have Easily Accessed Data
- **There Will Be Cultural Resistance to Output/Outcome-Focus**
  - We are accountable for delivering our outputs and justifying our strategies/intermediate outcomes.
  - We are responsible for our end outcomes.
  - Some will resist assuming responsibility for outcomes.
- **We Are Required To Do Performance Measurement – Let's Do It SMART**

Additional Resources

Army Performance Management Coordination office – 703-692-7412

Jerry L. Harbour, Ph.D. ***The Basics Of PERFORMANCE MEASUREMENT.*** Productivity Press, Portland, Oregon. 1997 (note – this is a quick one-hour read that sheds a lot of light on performance measurement)

Robert S. Kaplan and David P. Norton. ***The Balanced Scorecard. Translating Strategy Into Action.*** Harvard Business School Press. Boston, Massachusetts, 1996

Robert Simmons. ***Performance Measurement & Control Systems For Implementing Strategy*****.** Prentice Hall. Upper Saddle River, New Jersey, 2000